DOCUMENT RESUME

ED 270 955 EC 190 207

AUTHOR Svec, Henry
TITLE The Relationship between Situation Specific Subject Competence and Actual Achievement in Math, English, and Physical Education for the Learning Disabled Adolescent.
SPONS AGENCY Ontario Educational Research Council, Toronto.
PUB DATE [83]
NOTE 14p.
PUB TYPE Reports - Research/Technical (143)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS *Academic Achievement; Adolescents; Elementary Secondary Education; English Instruction; Language Proficiency; *Learning Disabilities; Males; Mathematics Achievement; Peer Acceptance; Physical Education; *Self Concept
IDENTIFIERS Situation Specific Subject Competence Test

ABSTRACT

The self-concept scores of 50 learning disabled male adolescents (mean age 16.5 years) on the Situation Specific Subject Competence Test for mathematics, English, and physical education were compared with their most recent achievement test performance in these three subject areas. Results suggested that math achievement was positively correlated with math self-concept, but that there was no relationship between English and physical education on self-concept and achievement scores. Results also indicated that reported peer acceptance in math was negatively correlated with academic achievement. The findings supported the prediction that learning disabled adolescents may have misconceptions about their abilities and may over- or underrepresent them. (Author/DB)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED270955

THE RELATIONSHIP BETWEEN SITUATION SPECIFIC SUBJECT COMPETENCE AND ACTUAL ACHIEVEMENT IN MATH, ENGLISH, AND PHYSICAL EDUCATION FOR THE LEARNING DISABLED ADOLESCENT

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☑ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

Henry Svec

356 Queens Avenue

London Ontario Canada

EC 190207

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

Henry Svec

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

This research was made possible by a grant from the Ontario Educational Research Council.

Abstract

The purpose of this work was to analyze the relationship between reported self-concept and academic achievement for the Learning Disabled Adolescent.

One group of fifty males, taken from four different learning disabled classrooms was used in this study. Each student was administered the self-concept test for Math English and Physical Education. The students last achievement mark in each of Math, English and Physical Education was then recorded.

The results suggested that for the Learning Disabled Adolescent, Math achievement is positively correlated with Math self-concept, while there is no relationship between English and Physical Education self-concept and achievement. The results also indicate that reported peer acceptance in Math, is negatively correlated with academic achievement.

The results supported the prediction that Learning Disabled Adolescents may have misconceptions about their abilities and may over or under represent them.

It was concluded that Learning Disabled Adolescents have perceptions about their "self" that could hinder performance in the school setting.

BEST COPY AVAILABLE

BEST COPY AVAILABLE

Introduction

The learning disabled adolescent often suffers from a variety of learning and affective disorders. While educators and researchers have concentrated on the learning disorders, the affective or self-concept is often lacking in descriptive information. Low self-concept has been reported to be a distinguishing characteristic of learning disabled adolescents. Svec (1983) reports that the self-concept of the learning disabled adolescent is lower in Physical Education and Math, than that of regular attending students. Rosenberg and Gaier (1977) used the Coopersmith Self Esteem Inventory to compare the differences in the academic and general self-concepts of L.D. adolescents and "normally" achieving males. Their results imply that the academic self-concept of the Learning Disabled adolescent is lower than that of the "normally" achieving subjects.

Svec (1983b) reveals that the self-concept may be represented by the students self-report on items dealing with voluntary actions, peer acceptance, facilitating and debilitating test anxiety and academic competence. These self-report items were originally adapted from earlier self-concept instruments (Piers & Harris 1964; Coopersmith 1967). Specific self-concept originally introduced by

Brookover and Thomas (1967) was expanded in the Svec (1983b) study to include the subjects of Math, English and Physical Education.

While this author conducted preliminary work into specific self-concept and learning disabilities (Svec 1983), little research has been conducted on the relationship of specific self-concept to academic achievement for the learning disabled adolescent. Tollefson (1982) reports that learning disabled adolescents have the ability to do very well in school but lack the effort to do so. The author reports that these adolescents have misconceptions about their actual abilities in certain subject areas. It may be that students under or over represent their abilities, refuse to put forth an effort, or have misconceptions about their chances for success.

This literature implies that for the learning disabled adolescent, reported self-concept may not be related to actual academic achievement.

Purpose

This study proposes to explore the relationship between self-concept and academic achievement in Math, English and Physical Education for the learning disabled

BEST COPY AVAILABLE

adolescent population. This study also proposes to establish the relationship between self reported academic competence, peer acceptance, voluntary actions and facilitating and debilitating test anxiety, with academic achievement in each of the subjects of Math, English and Physical Education.

METHOD

Subjects

The subjects (S's) for this study consisted of 50 males (mean age of 16.35 years) registered in the Learning Disabled resource program of four London High Schools. Students were placed in the special programs on the recommendation of a central review team and received assistance in the special classroom based on their individual plan.

Instruments

The Situation Specific Subject Competence Test (SSSCT) was used to test for specific self-concept in each of the subject areas of English, Math and Physical Education. For

BEST COPY AVAILABLE

"normal" males the test is said to correlate positively with achievement and differentiate between different academic environments (Svec 1983). The SSSCT has a test-retest reliability of .75 (over a 4 month period) and correlates with academic achievement in Math and Physical Education. The test takes 10 minutes to complete and instructions are at approximately the grade 3 reading level.

Procedure

A research assistant was used to administer the SSSCT in each of the 4 SLD programs. Upon completion of the self-concept questionnaire, data was collected from the teacher on the students most recent mark in Math, English and Physical Education.

Design

Data was collected on the S's age, and reported self-concept in each of Math, English and Physical Education. The self-concept and achievement scores were compared using the Pearson R (Winer 1962). The individual items (2 for each area) of peer acceptance, voluntary actions, facilitating test anxiety, academic competence and

BEST COPY AVAILABLE

debilitating test anxiety were then compared to the academic achievement scores using Pearson R.

RESULTS

Self-Concept and Academic Achievement

The reported self-concept in Math, English and Physical Education was compared to achievement in each of the subjects using the correlation coefficient R. The result of this analysis indicates that for the learning disabled adolescent only Math achievement is correlated to Math self-concept (.30 $p<.05$).
Table 1 presents the summary of this analysis.

Put table 1 about here.

In the Math subject area, reported peer acceptance was negatively correlated to actual math achievement. In English, reported Academic Competence and Voluntary Actions were positively correlated to achievement while in Physical Education none of the items were related to achievement.

BEST COPY AVAILABLE

TABLE 1

Product-Moment Correlations Between Academic Achievement and Self-Concept

A	AC	PA	VA	TAD	TAF	TOTAL
Eng	.29#	-.14	.37*	.19	.12	.20
Mat	.41*	-.28#	.30#	.31#	.43*	.30#
PE	.20	.11	.03	.02	.01	.10

KEY

A=Academic Subject
Ac=Academic Competence
PA=Peer Acceptance
VA=Voluntary Actions
TAD=Debilitating Test Anxiety
TAF=Facilitating Test Anxiety

*=p< .01
#=p< .05

BEST COPY AVAILABLE

Discussion

The results indicated that for the subject area of Math, actual achievement as measured by teachers' marks, is positively correlated with reported self-concept. This result is similar to the correlation discovered for normal and dropout males in the Svec (1983) study. It may be that the Mathematics environment, gives instant feedback to the student as to his capacities to achieve. As a result the student is able to compare his actual achievement daily, with those of his self-concept.

The lack of relationship between English achievement and self-concept and Physical Education achievement and self-concept compares favorably to the implications of the Tollefson (1982) study. This result implies that for the Learning Disabled adolescent a discrepency exists between actual academic functioning and perceived self-concept in English and Physical Education.

When the individual items of the test are compared to actual achievement, reported academic competence is positively related to both Math and English achievement. The lack of relationship for Physical Education, may be a result of the students lack of experience in a Physical Education classroom. A proportionately fewer number of

BEST COPY AVAILABLE

Learning Disabled adolescent males in this study, were involved in Physical Education courses.

Conclusions

For the learning disabled male adolescent, achievement in Mathematics is positively correlated to Math self-concept. The English and Physical Education achievement were not related to actual academic achievement. In Mathematics reported peer acceptance was negatively related to actual academic achievement. This result indicates that for the learning Disabled Male, improved academic achievement may hinder peer relationships. The results of this study also point to the need for future research to:

1)Investigate through interview techniques the reason for the Learning Disabled adolescents negative relationship between peer acceptance and achievement in Mathematics.

2)Explore the usefullness of appropriate goal setting as a method for improving learning disabled adolescents self-perceptions in the classroom.

BEST COPY AVAILABLE

REFERENCES

Brookover, W. B., Erickson, E. I. & Joiner, L. M. Self-concept of ability and school achievement: 111: Relationship of self-concept to achievement in high school. (USDE Cooperative Research Project No. 2831) East Lansing: Office of research and Publications, 1967.

Coopersmith, S. The antecendents of self-esteem. San Francisco: W. H. Freeman and Company, 1967.

Piers, E. V. & Harris, D. B. Age and other correlates of self-concept in children. Journal of Educational Psychology, 1964, 55, 91-95.

Rosenberg, B. & Gaier, E. The self concept of the adolescent with learning disabilities. Adolescence, 1977, 490-494.

Svec, H. The self-concept and achievement of high school dropout males and normal attending males in mathematics, physical education and English. M. Ed. Thesis. The Faculty of Education, The University of Western Ontario, December, 1983b.

BEST COPY AVAILABLE

Svec, H. The self-concept of the Learning disabled adolescent- Mainstreamed versus self-contained program. Paper presented at the 25th Annual Ontario Educational Research Council conference, Toronto Ontario, Dec. 1983.

Tollefson, N. Attribution patterns of L.D. adolescents. Learning Disability Quarterly, 1982, 14-20.

Winer, B. J. Statistical Principles in Experimental Design. McGraw Hill: Toronto, 1982.

BEST COPY AVAILABLE